number of occurrences over the mountains supports their stress on the influence of the underlying terrain.

Again, there is the handicap of the lack of knowledge about what is taking place in the areas other than those reporting turbulence. A more intensive observation program is needed in which reports of all the non-occurrences of C-A-T as well as the occurrences are available for analysis.

In the meantime, the Weather Bureau is collecting weekly a summary of pilot reports covering C-A-T occurrences from all of the Airway Forecast Centers as well as various airlines. Further papers covering these studies will be forthcoming.

ACKNOWLEDGMENTS

The writer wishes to acknowledge the encouragement and suggestions given by Dr. Harry Wexler and Mr. Newton Lieurance in this clear air turbulence research program. Special thanks must be given to Miss Sarah Kroll for her valuable assistance in the data compilation and analysis and in the preparation of the manuscript.

REFERENCES

- H. T. Harrison, "The Use of Horizontal Wind Shear in Forecasting High Level Clear Air Turbulence," United Air Lines, Inc., Meteorology Circular No. 49, Denver, July 15, 1959.
- J. J. George, A Method for the Prediction of Clear Air Turbulence, Eastern Air Lines, August 1960.
- 3. DeVer Colson, "Meteorological Problems in Forecasting Mountain Waves," Bulletin of the American Meteorological Society, vol. 35, No. 8, Oct. 1954, pp. 363-371.
- M. E. Balzer and H. T. Harrison, "The Nature of High Level Clear Air Turbulence," United Air Lines, Inc. Meteorology Circular No. 48, Denver, July 1, 1959.
- E. L. Keitz, "Differential Advection as a Factor in Clear-Air Turbulence," Journal of Meteorology, vol. 16, No. 1, Feb. 1959, pp. 57-62.
- J. Clodman, G. M. Morgan Jr., J. T. Ball, High Level Turbulence, Research Division, College of Engineering, New York University, Contract No. AF 19(604)-5208, September 1960.

Recent Articles in Other Weather Bureau Periodicals

Mariners Weather Log, vol. 5

No. 1, January 1961

"North Atlantic Tropical Cyclones, 1960," by G. W. Cry, pp. 1-7.

"Commission on Maritime Meteorology," by W. W. Shinners,

Weekly Weather and Crop Bulletin, National Summary, vol. XLVII No. 46, November 4, 1960

"Mean Percentage of Possible Sunshine, November" (Map for United States) p. 8.

No. 48, November 28, 1960

"Mean Percentage of Possible Sunshine, December," p. 8.

No.52, December 26, 1960

"Index of Special Articles in Weekly Weather and Crop Bulletin 1960", p. 8.

Vol. XLVIII

No. 2, January 9, 1961

"Climatological Probabilities of the Weather of Inauguration Day," by M. L. Waggoner, p. 8.

No. 4, January 23, 1961

"Disaster Designations and Emergency Production Loans,"
January 1-December 31, 1960 (Map for contiguous United
States plus descriptions for Alaska, Hawaii, Puerto Rico,
and Virgin Islands) (Data from Federal Register.)